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| 09/896,859 | 06/29/2001 | William Ronald Greenwood | GREN001 | 9031 |

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ARYANPOUR, MITRA

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| ART UNIT | PAPER NUMBER |
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3711

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,859

Applicant(s)

GREENWOOD, WILLIAM RONAL

Examiner

Mitra Aryanpour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7-12, 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Maio (4,767,117).

Regarding claim 1, Maio discloses an amusement ride and game comprising a dummy horse (25) and at least one movable ball-receiving surface (the top surface of 24) located adjacent to and below the dummy horse (25); the game is a combination of an amusement ride and a polo game utilizing a ball (18) and a mallet (19); and two or more inclined surfaces (the two inclined sides of shield 22). Note: The preamble, *a polo training apparatus* does not limit the structure of the claimed device because the portion of the claim following the preamble is a self-contained description of the structure and does not depend on the preamble for completeness. With regards to the limitation a ball-receiving surface, the surface (the upper surface of 24) of Maio can receive a ball (see figure 1).

Regarding claims 2 and 3, Maio shows at least one ball-receiving surface (the top surface of 24) located on one side of the dummy horse (25); wherein the one ball-receiving surface (the top surface of 24) is displaceable in a direction substantially parallel to the fore/aft direction of the dummy horse (the ball-receiving surface is rotatable).

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Regarding claims 4 and 5, Maio shows a plurality of ball receiving surfaces (the surface on either side of the horse and also ramp 11), and more specifically two ball-receiving surface, one located on each side of the dummy horse (25; see figure 1).

Regarding claims 7 and 8, Maio shows the dummy horse (25) is displaceable (the broadest reasonable interpretation of displaceable would include the rotational movement of the ball-receiving surface which the dummy horse is attached to); and the dummy horse (25) is movable in a reciprocating motion (the broadest reasonable interpretation of reciprocating would include the up-and-down movement of the dummy horse).

Regarding claim 9, inasmuch as applicant has defined “simulating the movement of a real polo horse” Maio also shows the dummy horse to simulate the movements of a real polo horse.

Regarding claims 10-12, Maio shows the speed of movement of the dummy horse (25) is a function of the speed of the ball-receiving surface (24) and the speed of the dummy horse and the speed of the ball-receiving surface are directly proportional to one another; and wherein the dummy horse and the speed of the ball-receiving surface are driven by the same means (it is a rotating carousel).

Regarding claim 14, Maio shows the two or more inclined surfaces (the two sides of shield 22) adjacent to the ball-receiving surface (24) are at oblique angles to the ball-receiving surface (the two sides are slanted, since ramp 11 is not uniformly wide).

Regarding claim 15, Maio shows a peripheral enclosure (the vertical supports of the dummy horses form a peripheral enclosure).

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Regarding claim 16, Maio shows the enclosure comprises a cage or net (the vertical supports and the top portion of the carousel forms a roof over the vertical supports which give a cage-like appearance).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maio (4,767,117).

Regarding claim 13, Maio does not expressly disclose the driving means, however, rotating carousels are customarily driven by electric motors, and obvious to use the same here.

Additionally:

5. Claims 1, 7-9 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins (GB 2,233,913A).

Regarding claim 1, Collins shows a polo training apparatus comprising a dummy horse (13) and at least one ball-receiving surface (the ground surface) located adjacent to and below the dummy horse (13); and two or more inclined surfaces (the area covered by surface area 10 which is positioned on either side of column 24; see page 1, lines 7-12). Collins shows the dummy horse (13) is movable with respect to the ball-receiving surface. It should be noted that the ball-receiving surface (the ground) is located on both sides and below the dummy horse (13) and it is displaceable with respect to the moving horse and the rider.

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Regarding claims 7-9, Collins additionally shows the dummy horse (13) is displaceable (the dummy horse can be moved or shifted from its usual place); is moveable in a reciprocating motion (see page 1, lines 16-23) and wherein the dummy horse is movable to simulate the movements of a real polo horse during a game of polo (see page 4, lines 1-5).

Regarding claim 14, Collins shows that the two or more moveable surfaces (the area covered by surface area 10 which is positioned on either side of column 24) are at oblique angles to the ball-receiving surface (see page 3, lines 20-28).

Regarding claim 15, Collins shows the training apparatus comprises a peripheral enclosure (12).

Regarding claim 16, Collins shows the enclosure comprises a net (see column 3, lines 21-23).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (GB 2,233,913A) in view of Gruttemeler (DE 3704150A1).

Regarding claim 6, Collins is silent with regards to the use of an endless conveyor belt. However, Collins teaches that the dummy horse (13) may also be used without the practice surface area (10) if such is desired. Additionally, Collins teaches that the drive means may be altered so that the body portion simulates a different type of horse movement. Gruttemeler shows a training apparatus comprising a dummy horse (1) and at least one movable ball-receiving surface (17) located adjacent to and below the dummy horse (1); wherein the moveable ball receiving surface comprises one run of an endless conveyor belt (17; see page 8, lines 11-15). In view of Gruttemeler it would have been obvious to include an endless conveyor belt for the ball-

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receiving surface of Collins, the motivation being to simulate the motion of the dummy horse more closely to a real horse.

7. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Greenwood (5,429,515).

Regarding claim 17, Greenwood ('515) discloses a training apparatus comprising a dummy horse having a substantially rigid frame (88) and a body portion (12) pivotally mounted on the frame, a pivotally mounted neck portion (20) extending from the pivotally mounted body portion (12) and a pivotally mounted head (22) extending from the neck portion, whereby the body of the dummy horse moves from side-to-side (see column 5, lines 50-65).

Regarding claims 18 and 19, Greenwood further shows a biasing means for biasing the body portion towards a central position; wherein the biasing means comprises springs (see column 4, lines 3-16).

8. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenwood (5,429,515) in view of Gruttemeler (DE 37 04 150 A1).

Regarding claims 20 and 21, Greenwood ('515) shows pressure sensors (96, 96a and 96b) positioned on the simulated horse (see column 5, lines 35-45) that respond to pressure from the whip of a rider. Gruttemeler shows the simulated horse (1) has sensors positioned on the neck (4a), saddle (7) and sides (feet and knee area) of the dummy horse (sensors 10, 11 and 9 respectively) so that pressure is detected from one or more parts of the rider's body. Gruttemeler shows the aforementioned areas are common pressure-point areas for the rider to be able to

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control and maneuver the horse. In view of Gruttemeler, it would have been obvious to have provided sensors in these same areas for the simulated horse of Greenwood, the motivation being, to realistically simulate a real horse in order to provide maximum training for the rider.

Regarding claim 22, Greenwood shows a display means for indicating the correct whipping area by the rider (see column 6, lines 15-33). Greenwood does not show the display means to indicate the rider's correct posture. Gruttemeler additionally shows measuring or sensing means (9, 10 and 11) for determining the particular posture of a rider and displays the results on the display unit (16; see page 6, lines 8-19). In view of Gruttemeler, it would have been obvious to include a display means with additional detection means, the motivation being so the rider is notified when having an incorrect posture.

Regarding claim 23, Greenwood shows the display means comprises lights (see column 6, lines 19).

9. Claims 24, 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al (4,988,300).

Regarding claim 24, Yamaguchi et al discloses a horse riding training apparatus comprising a movable body portion (2c) upon which a rider sits (1), a movable neck portion (2e; see column 2, lines 28-29) extending from the body portion (2c) and a movable head (2d; extending from the neck portion (2e; see column 2, lines 27-28), and means for displacing the body portion both in a reciprocating motion and a pivotal motion pivoting the body portion from side to side (see figures 7 and 8), the apparatus further comprising sensor means (see figure 17) responsive to a simulated riding action in order to control the apparatus (rider's feet 26a, 26b; knees 29a-d; and hand 27a-e; see column 13, lines 3-44).

Regarding claim 26, inasmuch as applicant has defined “a real polo horse” Yamaguchi et al dummy horse (2) also simulate the movements of a real polo horse during a game of polo.

Regarding claim 27, Yamaguchi et al shows one or more sensors adapted to detect pressure from one or more parts of the rider’s body (see figure 17).

Regarding claim 28, Yamaguchi et al shows one or more sensors adapted to detect pressure from one or more parts of the rider’s feet (26a, 26b) knees (29a-d) and hand (27a-e). See column 3, lines 3-44.

Regarding claim 29, Yamaguchi et al shows sensors (sensors in the form of piezoelectric elements 29a-d) adapted to respond to pressure from a rider’s feet (see column 13, lines 37-44), wherein actuation of the pressure sensors causes an increase in the speed of movement of the body portion (see column 6, lines 63-68).

Regarding claim 30, Yamaguchi et al shows a simulated horse head portion (2d), reins (33) extending from the horse head portion and a control means (19) actuated by the movement of the head with the reins (see column 13, lines 21-32).

Regarding claim 31, Yamaguchi et al shows the movement of the head actuates a switch which, when operated reduces the speed of the body portion (by pulling on the rein 33 which is attached to the head portion 2d the horse is commanded to slow down or ultimately stop; see column 7, lines 35-44).

Response to Arguments

10. Applicant's arguments with respect to claims 1-16 and 24, 26-31 have been considered but is moot in view of the new ground(s) of rejection. Regarding the rejection of claims 17-23,

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contrary to applicant's arguments the body of Greenwood ('515) does move from side-to-side (see column 5, lines 50-65).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Russell; Mooney; Hehenwarter; Carrajana; Fidelak et al.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Aryanpour whose telephone number is 703-308-3550. The examiner can normally be reached on Monday - Friday 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MA
28 April 2004



MITRA ARYANPOUR
PATENT EXAMINER